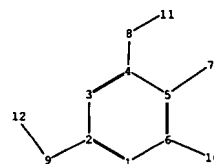
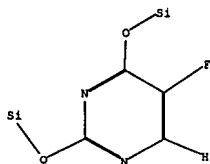


## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	136	536/28.4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/10/01 09:17
L2	707	536/55.3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/10/01 09:34
L3	53	giorgio.inv. and Bertolini.inv.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/10/01 09:36
L4	94	Marco.inv. and Frigerio.inv.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/10/01 09:36
S1	3	("4340729").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/09/25 15:08
S2	251	5'-deoxy-5-fluorouridine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/10/01 09:17



```

chain nodes :
  7  8  9  10  11  12
ring nodes :
  1  2  3  4  5  6
chain bonds :
  2-9  4-8  5-7  6-10  8-11  9-12
ring bonds :
  1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
  2-9  4-8
exact bonds :
  5-7  6-10  8-11  9-12
normalized bonds :
  1-2  1-6  2-3  3-4  4-5  5-6
isolated ring systems :
  containing 1 :

```

```

Match level :
  1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS
 10:CLASS 11:CLASS 12:CLASS

```

10/576,598

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PASSWORD:

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NEWS 3 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 4 JUL 02 CHEMCATS accession numbers revised  
NEWS 5 JUL 02 CA/CAPplus enhanced with utility model patents from China  
NEWS 6 JUL 16 CAPplus enhanced with French and German abstracts  
NEWS 7 JUL 18 CA/CAPplus patent coverage enhanced  
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification  
NEWS 9 JUL 30 USGENE now available on STN  
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 11 AUG 06 BEILSTEIN updated with new compounds  
NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 13 AUG 13 CA/CAPplus enhanced with additional kind codes for granted patents  
NEWS 14 AUG 20 CA/CAPplus enhanced with CAS indexing in pre-1907 records  
NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 16 AUG 27 USPATOLD now available on STN  
NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index  
NEWS 19 SEP 13 FORIS renamed to SOFIS  
NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency  
NEWS 21 SEP 17 CA/CAPplus enhanced with printed CA page images from 1967-1998  
NEWS 22 SEP 17 CAPplus coverage extended to include traditional medicine patents  
NEWS 23 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 02:56:05 ON 01 OCT 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 02:56:16 ON 01 OCT 2007

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

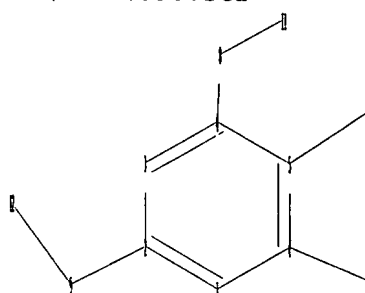
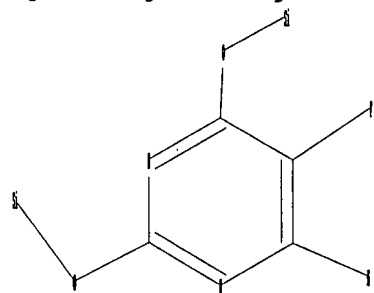
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10576598.str



chain nodes :

7 8 9 10 11 12

ring nodes :

1 2 3 4 5 6

chain bonds :

2-9 4-8 5-7 6-10 8-11 9-12

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

2-9 4-8

exact bonds :

5-7 6-10 8-11 9-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

10/576,598

containing 1 :

Match level :

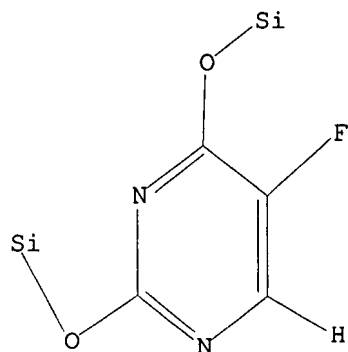
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11:CLASS 12:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 02:56:40 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 9 TO 360

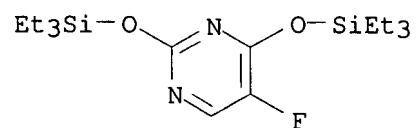
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d scan

10/576,598

L2 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Pyrimidine, 5-fluoro-2,4-bis[(triethylsilyl)oxy]- (9CI)  
MF C16 H31 F N2 O2 Si2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

10/576,598

=> s 11 sss ful

FULL SEARCH INITIATED 02:56:59 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 147 TO ITERATE

100.0% PROCESSED 147 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.01

L3 6 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

172.31

FILE 'CAPLUS' ENTERED AT 02:57:05 ON 01 OCT 2007

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=> s 13

L4 298 L3

=> s 14 and process

2497806 PROCESS

L5 7 L4 AND PROCESS

=> s 14 and doxifluridine

293 DOXIFLURIDINE

L6 2 L4 AND DOXIFLURIDINE

=> s 15 or 16

L7 7 L5 OR L6

=> d 17 1-7 bib abs

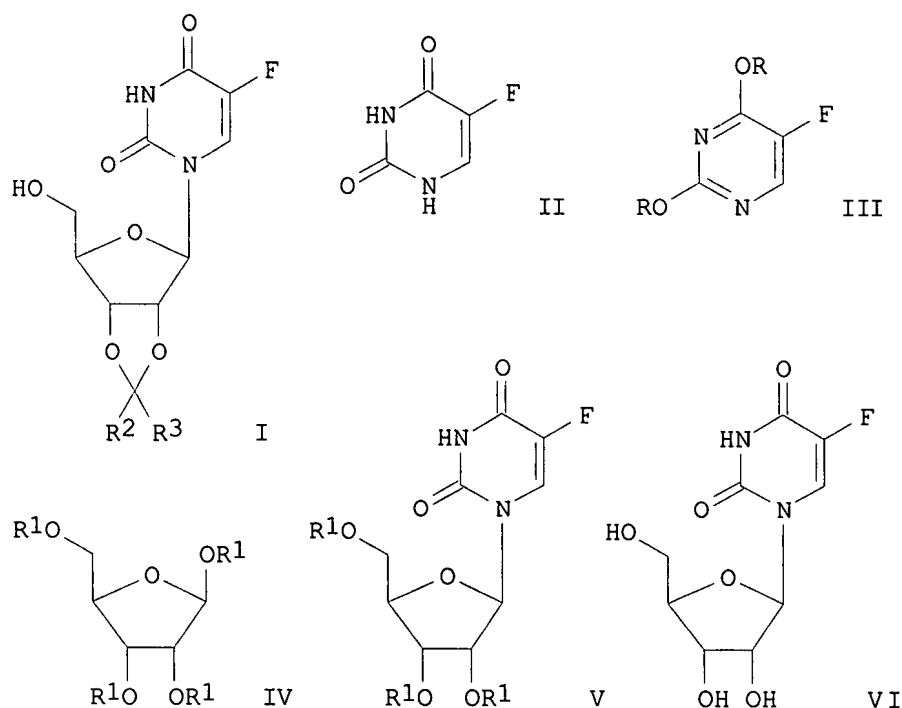
10/576,598

L7 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2004:962291 CAPLUS  
DN 143:60175  
TI Efficient Pyrimidine N-1-Alkylation via Activation of Electron Rich  
Olefins with Oxoammonium Salts: Synthesis of Methoxy TEMPO Substituted  
Pyrimidine Nucleoside Analogs  
AU Church, Kevin M.; Holloway, Liesel M.; Matley, Ryan C.; Brower, Robert J.,  
III  
CS Department of Chemistry, University of Dayton, Dayton, OH, 45469, USA  
SO Nucleosides, Nucleotides & Nucleic Acids (2004), 23(11), 1723-1738  
CODEN: NNNAFY; ISSN: 1525-7770  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
OS CASREACT 143:60175  
AB The use of oxoammonium salts in a formal 1,2-addition process to  
olefins giving nucleoside analogs as products was described.  
Specifically, oxoammonium salts can be added to a solution of olefin and  
silylated heterocycle to give Methoxy-TEMPO substituted nucleoside analogs  
after hydrolytic workup and chromatog. purification  
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT



L7 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2002:664103 CAPLUS  
 DN 137:169742  
 TI Step-wise and one-pot processes for the preparation of a uridine  
 derivative, namely 2',3'-O-alkylidene-5-fluorouridine, from 5-fluorouracil  
 IN Cotticelli, Giovanni; De Meglio, Giuseppe; Monciardini, Simone; Ordanini,  
 Giancarlo  
 PA Pro.Bio.Sint. Srl, Italy  
 SO Ital., 17 pp.  
 CODEN: ITXXBY  
 DT Patent  
 LA Italian  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IT 1302006	B1	20000720	IT 1998-MI1852	19980806
PRAI	IT 1998-MI1852		19980806		
OS	CASREACT 137:169742; MARPAT 137:169742				
GI					



AB Title compds. I [R<sub>2</sub>, R<sub>3</sub> = H, C1-4 alkyl; or R<sub>2</sub>R<sub>3</sub> = (CH<sub>2</sub>)<sub>4</sub> or (CH<sub>2</sub>)<sub>5</sub>] are prepared by an improved method. In particular, I are prepared in 4 steps, which may be carried out sep. or in a single pot. Specifically, (1) 5-fluorouracil (II) is treated with a silylating agent until it is completely solubilized; (2) the resultant silylated product III [R = H or trialkylsilyl, especially SiMe<sub>3</sub>] is treated with a β-D-ribose tetraester IV [R<sub>1</sub> = alkanoyl, benzoyl, or benzoyl substituted with Me, OMe, NO<sub>2</sub>, F, Br, or Cl] in the presence of a condensing agent; (3) the obtained 5-fluorouridine triester V is hydrolyzed; and finally (4) the resulting 5-fluorouridine (VI) is treated with a ketone R<sub>2</sub>COR<sub>3</sub> in an acidic medium. For example, in a one-pot preparation of I [R<sub>2</sub> = R<sub>3</sub> = Me] from II, using ClSiMe<sub>3</sub> and HMDS in step 1, 1β-D-tetraacetylribose in step 2, aqueous NH<sub>3</sub>

10/576,598

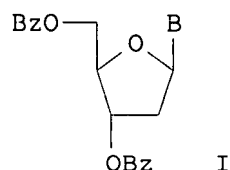
in MeOH in step 3, and acetone containing H<sub>2</sub>SO<sub>4</sub> in step 4, an overall yield of approx. 70% was obtained, with a product purity of 99.7% by HPLC. Examples of the individual steps for the case of R<sub>2</sub> = R<sub>3</sub> = Me are also given. I are known intermediates for the cytostatic agent doxifluridine.

10/576,598

L7 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2002:402634 CAPLUS  
DN 138:187722  
TI Improved process for the synthesis of Doxifluridine  
AU Dong, Hui; Qian, Hong  
CS Anhui Keyu Research Institute of Drugs, Hefei, 230001, Peop. Rep. China  
SO Zhongguo Yiyao Gongye Zazhi (2002), 33(3), 108-110  
CODEN: ZYGZEA; ISSN: 1001-8255  
PB Zhongguo Yiyao Gongye Zazhi Bianjibu  
DT Journal  
LA Chinese  
OS CASREACT 138:187722  
AB Doxifluridine was synthesized from 5-fluorouracil via tri-Me silylation, condensation, saponification, ketal formation, iodation, hydrogenolysis, and hydrolysis, giving the product with overall yield 54.6%.

10/576,598

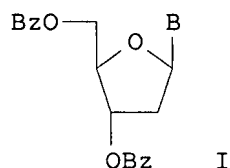
L7 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1996:501735 CAPLUS  
DN 125:248308  
TI Stereocontrolled De Novo Synthesis of  $\beta$ -2'-Deoxyribonucleosides  
AU Park, Minnie; Rizzo, Carmelo J.  
CS Department of Chemistry, Vanderbilt University, Nashville, TN, 37235, USA  
SO Journal of Organic Chemistry (1996), 61(18), 6092-6093  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 125:248308  
GI



AB A stereocontrolled, de novo preparation of  $\beta$ -2'-deoxyribonucleosides, e.g. I (B = uracil, thymine), has been achieved. The process required just four steps from com. available 1,3,5-tribenzoyl- $\alpha$ -D-ribose and proceeded in high overall yield. The key synthetic strategy was the use of a m-trifluoromethylbenzoyl group at the 2-position of ribose to direct the glycosidation reaction and also serve as a deoxygenation precursor. The five 2'-deoxynucleosides that were synthesized were 2'-deoxyuridine, thymidine, 5-fluoro-2'-deoxyuridine, 5-trifluoromethyl-2'-deoxyuridine (trifluiridine) and 2'-deoxycytidine.

10/576,598

L7 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1996:501735 CAPLUS  
DN 125:248308  
TI Stereocontrolled De Novo Synthesis of  $\beta$ -2'-Deoxyribonucleosides  
AU Park, Minnie; Rizzo, Carmelo J.  
CS Department of Chemistry, Vanderbilt University, Nashville, TN, 37235, USA  
SO Journal of Organic Chemistry (1996), 61(18), 6092-6093  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 125:248308  
GI

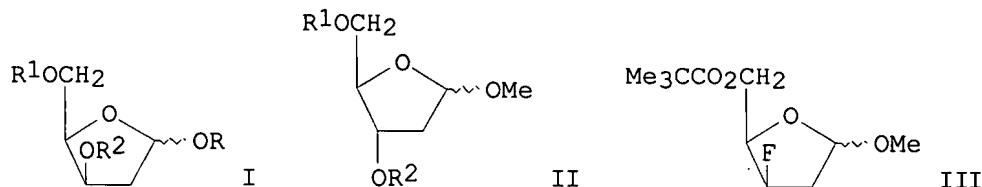


AB A stereocontrolled, de novo preparation of  $\beta$ -2'-deoxyribonucleosides, e.g. I (B = uracil, thymine), has been achieved. The process required just four steps from com. available 1,3,5-tribenzoyl- $\alpha$ -D-ribose and proceeded in high overall yield. The key synthetic strategy was the use of a m-trifluoromethylbenzoyl group at the 2-position of ribose to direct the glycosidation reaction and also serve as a deoxygenation precursor. The five 2'-deoxynucleosides that were synthesized were 2'-deoxyuridine, thymidine, 5-fluoro-2'-deoxyuridine, 5-trifluoromethyl-2'-deoxyuridine (trifluiridine) and 2'-deoxycytidine.

10/576,598

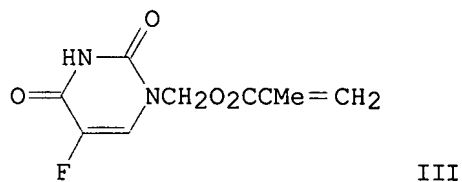
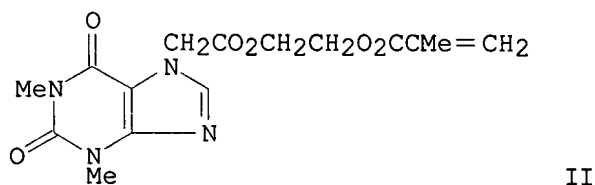
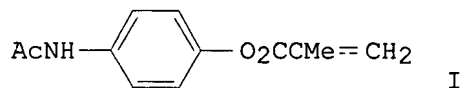
L7 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1992:41980 CAPLUS  
 DN 116:41980  
 TI Process for the manufacture of 2-deoxy-D-threo-pentofuranosides,  
 intermediates for their manufacture and their use  
 IN Saischek, Gerald; Fuchs, Franz; Dax, Karl; Billiani, Gertrude  
 PA Chemische Produkte Saischek G.m.b.H. (CHEMPROSA), Austria  
 SO Eur. Pat. Appl., 32 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 450585	A2	19911009	EP 1991-105231	19910403
	EP 450585	A3	19930310		
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	AT 9000791	A	19911015	AT 1990-791	19900404
	AT 394564	B	19920511		
	AT 9001410	A	19920115	AT 1990-1410	19900703
	AT 395426	B	19921228		
	CA 2039403	A1	19911005	CA 1991-2039403	19910328
	FI 9101603	A	19911005	FI 1991-1603	19910403
	HU 57225	A2	19911128	HU 1991-1086	19910403
	JP 05097885	A	19930420	JP 1991-154206	19910404
PRAI	AT 1990-791	A	19900404		
	AT 1990-1410	A	19900703		
OS	CASREACT 116:41980; MARPAT 116:41980				
GI					



AB Title compds. I (R = alkyl; R1 = protective group, R2 = H) were prepared from the erythro isomers. Thus, erythro-pentofuranoside II (R1, R2 = H) was pivaloylated and mesylated to give II (R1 = Me3CCO, R2 = MeSO2) which was treated with BzONa to give I (R = Me, R1 = Bz, R2 = Me3CCO). The latter compound was debenzoylated, mesylated, and treated with Bu4NF to give fluoride III which was deacylated and deglycosidated to give 2,3-dideoxy-3-fluoro-D-erythro-pentose.

L7 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1991:457020 CAPLUS  
 DN 115:57020  
 TI A new development of mechanochemical solid-state polymerization of vinyl monomers: prodrug syntheses and its detailed mechanistic study  
 AU Kuzuya, Masayuki; Kondo, Sinichi; Noguchi, Akihiro  
 CS Lab. Pharm. Phys. Chem., Gifu Pharm. Univ., Gifu, 502, Japan  
 SO Macromolecules (1991), 24(14), 4047-53  
 CODEN: MAMOBX; ISSN: 0024-9297  
 DT Journal  
 LA English  
 GI



AB The first exptl. example of mechanochem. polymerization of specially synthesized solid-state monomers, methacryloyl derivs. of bioactive compds., I-III, is described. It has been shown, however, that there exists a monomer selectivity for efficiency of such reactions, although all the monomers studied undergo conventional solution polymns. using radical initiators. The detailed mechanistic implications on the reaction of I, as a representative example, have been clarified based on ESR kinetics on its comparison with that of the corresponding mechanoradical formation of I polymer, the progressive changes in mol. weight distribution including its heterogeneity, and kinetics of the polymer conversion. It has been shown that the mechanochem. polymerization involves a mechanoradical-initiated polymerization as a dominant process, and if one appropriate designs methacryloyl vinyl monomers along the line of the structural criteria derived from the quantum chemical considerations, one can make a variety of solid-state monomers undergo the mechanochem. polymns. essentially quant. Thus, the present result provides a novel and simple methodol. for polymeric prodrug syntheses of low heterogeneity through a totally dry process.

10/576,598

L7 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1988:406905 CAPLUS  
DN 109:6905  
TI New process for the preparation of purine and pyrimidine  
nucleosides  
IN Noyori, Ryoji; Hayashi, Masahiko  
PA Sankyo Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 62267294	A	19871119	JP 1986-112135	19860516
PRAI	JP 1986-112135		19860516		
OS	CASREACT 109:6905				
GI	For diagram(s), see printed CA Issue.				
AB	The title nucleosides (I; R = pyrimidine or purine base residue; R1, R2 = protecting group; l, m, n = 0-3 wherein l + m + n = 2, 3) (II) of medicinal interest were prepared by glycosidation of 1-fluoro sugar derivs. I (R = F) with purines or pyrimidines silylated with 1-3 Me3Si groups. SiF4 in MeCN was added at 0° to a solution of 2,3,5-tri-O-benzyl- $\alpha$ -D-ribofuranosyl fluoride and bis(trimethylsilyl)uracil in MeCN and the mixture was stirred 2h at 0° to give 85% a 1:5.2 mixture of 1-(2',3',5'-tri-O-benzyl- $\alpha$ - and $\beta$ -ribofuranosyl)uracil.				



10/576,598

=> d 15 1-2 bib abs

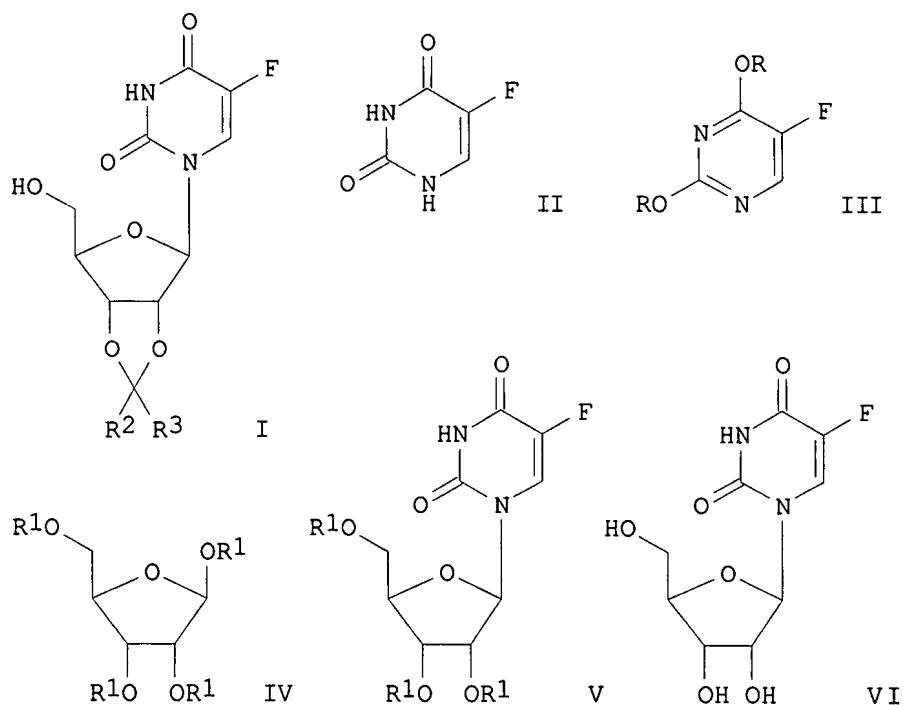
10/576,598

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2004:962291 CAPLUS  
DN 143:60175  
TI Efficient Pyrimidine N-1-Alkylation via Activation of Electron Rich  
Olefins with Oxoammonium Salts: Synthesis of Methoxy TEMPO Substituted  
Pyrimidine Nucleoside Analogs  
AU Church, Kevin M.; Holloway, Liesel M.; Matley, Ryan C.; Brower, Robert J.,  
III  
CS Department of Chemistry, University of Dayton, Dayton, OH, 45469, USA  
SO Nucleosides, Nucleotides & Nucleic Acids (2004), 23(11), 1723-1738  
CODEN: NNNAFY; ISSN: 1525-7770  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
OS CASREACT 143:60175  
AB The use of oxoammonium salts in a formal 1,2-addition process to  
olefins giving nucleoside analogs as products was described.  
Specifically, oxoammonium salts can be added to a solution of olefin and  
silylated heterocycle to give Methoxy-TEMPO substituted nucleoside analogs  
after hydrolytic workup and chromatog. purification  
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/576,598

L5 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2002:664103 CAPLUS  
DN 137:169742  
TI Step-wise and one-pot processes for the preparation of a uridine derivative, namely 2',3'-O-alkylidene-5-fluorouridine, from 5-fluorouracil  
IN Cotticelli, Giovanni; De Meglio, Giuseppe; Monciardini, Simone; Ordanini, Giancarlo  
PA Pro.Bio.Sint. Srl, Italy  
SO Ital., 17 pp.  
CODEN: ITXXBY  
DT Patent  
LA Italian  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IT 1302006	B1	20000720	IT 1998-MI1852	19980806
PRAI	IT 1998-MI1852		19980806		
OS	CASREACT 137:169742; MARPAT 137:169742				
GI					



AB Title compds. I [R2, R3 = H, C1-4 alkyl; or R2R3 = (CH2)4 or (CH2)5] are prepared by an improved method. In particular, I are prepared in 4 steps, which may be carried out sep. or in a single pot. Specifically, (1) 5-fluorouracil (II) is treated with a silylating agent until it is completely solubilized; (2) the resultant silylated product III [R = H or trialkylsilyl, especially SiMe3] is treated with a  $\beta$ -D-ribose tetraester IV [R1 = alkanoyl, benzoyl, or benzoyl substituted with Me, OMe, NO2, F, Br, or Cl] in the presence of a condensing agent; (3) the obtained 5-fluorouridine triester V is hydrolyzed; and finally (4) the resulting 5-fluorouridine (VI) is treated with a ketone R2COR3 in an acidic medium. For example, in a one-pot preparation of I [R2 = R3 = Me] from II, using ClSiMe3 and HMDS in step 1, 1 $\beta$ -D-tetraacetylribose in step 2, aqueous NH3

10/576,598

in MeOH in step 3, and acetone containing H<sub>2</sub>SO<sub>4</sub> in step 4, an overall yield of approx. 70% was obtained, with a product purity of 99.7% by HPLC. Examples of the individual steps for the case of R<sub>2</sub> = R<sub>3</sub> = Me are also given. I are known intermediates for the cytostatic agent doxifluridine.

10/576,598

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

31.37

203.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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